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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/711,354 | 11/09/2000 | Uri Polat | 251/255 | 6811 |
| 7590 | 07/01/2004 | | EXAMINER | |
| | | | PATEL, SHEFALI D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2621 | 16 |

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/711,354 | POLAT ET AL. |
| | Examiner | Art Unit |
| | Shefali D Patel | 2621 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 April 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 23-54 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 55-61 is/are allowed.
- 6) Claim(s) 23-54 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 April 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/711,354.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment was received on April 1, 2004.
2. A copy of the foreign priority has been received and made of record.
3. The objection to the drawings has been withdrawn, proposed correction of Figure 6 have been approved.
4. Claims 1-22 have been cancelled.
5. 35 U.S.C. 112 2nd paragraph rejections made to Claims 3, 10-13, 15-18 have been withdrawn.
6. New 112 2nd paragraph rejections to claims 37-39 have been made in detail below.

Response to Arguments

1. Applicant's arguments filed on April 1, 2004 under remarks on pages 15-17 (regarding original claims 23-39) have been fully considered but they are not persuasive. Applicants on page 16 argue "Sinclair et al also fails to disclose a treatment phase using the identified defects to treat the person in order to improve the person's visual perception ability with respect to a detected visual defect." Applicants' arguments regarding the "treatment phase" are unconvincing. This component is not recited in the independent claims 23 and 28.

Claim Objections

2. Claims 37-39 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

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claim(s) in independent form. **NOTE: Claims 37-39 depend on claim 9, which has been cancelled.**

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 37-38 recites the limitation "the step of" in line 1 of claims 37-38. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 40 recites the limitation "the responses" in line 4 (step (b)) of claims 40 on page 9. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 41-54 are rejected for the same reasons as claim 40.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 23-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellicano (US 6,386,707) in view of Sinclair et al. (hereinafter, "Sinclair") (USPN 5,589,897).

With regard to **claim 23** Pellicano discloses method comprising: a host terminal (host server 30, Fig. 1(a)) sending parameters to a client terminal (sending parameters thru internet 20

to client terminal 10, Fig. 1(a)), receiving the user performance data (client terminal 10 receives the data from the network communication 20, Fig. 1(a)); and analyzing the user performance data (analyzing the data for a variety of vision acuity tests at col. 4 lines 4-11); the client terminal (client terminal 10, Fig. 1 (a)). Pellicano does not expressly disclose detail of the client terminal. However, Sinclair discloses the client terminal comprising: receiving the parameters (Sinclair: col. 5 lines 66-67 to col. 6 lines 1-3); generating a set of images based upon the parameters (Sinclair: column 5 lines 47-51, the input program generates the series of images including the target as shown in Fig. 1); presenting the set of images on a display screen (display screen/monitor 11/12. Sinclair: See, col. 5 lines 27-29); receiving an input from a user based on the user's perception of the set of images (Sinclair: column 5 lines 66-67 to column 6 lines 1-3); generating a further set of images based at least in part upon the parameters and based at least in part upon the user input ((Sinclair: See, column 6 lines 3-7). As to "generating a further image" based on the input as called for in claim 23, this limitation corresponds to the progressively larger or smaller images generated according to the techniques in Sinclair at column 6 lines 5-17.); generating user performance data based at least in part upon the user input (when user inputs their perception, data is being generated. Sinclair: See, col. 5 lines 47-51); and Pellicano's client terminal sends this user performance data to the host terminal (client terminal 10 sends the data to host server 30 thru network connection 20, Fig. 1(a)). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Pellicano with Sinclair. The motivation for doing so is that including detail information of how the client terminal performs based on user's input would have been obvious from Sinclair. Note, Pellicano (as described above) discloses a variety of vision acuity tests for identifying visual

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abilities at col. 4 lines 4-67. Pellicano simply goes thru the process without disclosing the detail of the client terminal. Therefore, it would have been obvious to combine Pellicano with Sinclair to obtain the invention as specified in claim 23.

With regards to **claim 24** Sinclair discloses the terminal repeating the steps of generating a set of images presenting the set of images, receiving an input from a user, and generating a further set of images until a predefined user goal has be reached (as disclosed in claim 9) repeated a number of times at column 6 lines 9-11. Note: the desired level of improvement in the person's visual perception corresponds to the requirement in Sinclair that the "C" orientations are accurately perceived.

With regard to **claim 25** Pellicano discloses the client terminal (Fig. 1(a)) that sends a request to the host terminal for access to software for identifying visual and neurological abilities and improving visual and neurological performance (client terminal is sending a request to the host terminal via a communication network (Internet) for access to software for identifying vision acuity tests. See, col. 3 lines 13-16 and col. 4 lines 4-8).

With regard to **claim 26** applicants' attention is further invited to a set of images as seen in Figure 2 and the respective portion at column 6 lines 26-30 where elements 20, 21 and 22 are the set of images. Further, Pellicano discloses a calibration data at col. 3 lines 65-67 to col. 4 lines 1-3.

With regard to **claim 27** Pellicano discloses the host terminal generating a further set of parameters based at least in part upon the analysis of the user performance data (host server creating a color change upon user's input at col. 4 lines 32-36).

With regard to **claim 28**, Pellicano (as modified by Sinclair) discloses all of the claimed subject matter as already discussed above in claim 23 and the arguments are not repeated herein, but are incorporated by reference. Claim 28 distinguishes from claim 23 only in that it recites proving the Internet website. Applicants' attention is further invited to an Internet browser (i.e., Internet website) disclosed in Pellicano at col. 2 lines 67 to col. 3 lines 1-3. Connection is made between the host server 30 and a client terminal 10 after entering the correct website address as seen in Fig. 1 (a) of Pellicano.

With regard to **claim 29** Sinclair discloses the further image, which is generated by modifying one or more characteristics of the image shown at column 6 lines 3-7. The size of the image is increased or decreased as the further image is being generated.

Claim 30 recites identical features as claim 24 except claim 30 is a method claim. Thus, arguments similar to that presented above for claim 24 is equally applicable to claim 30.

With regard to **claim 31** Pellicano discloses authenticating a user (account number is used when logging in to the terminal and it is being validated via Internet for authenticating a user. See, col. 3 lines 23-30).

With regard to **claim 32**, Pellicano discloses a processor that is communicatively coupled to one or more sequences or processor executable instructions (the server is executing executable instructions (from a processor) when a client has made a request. See, col. 3 lines 13-16 and 25-29) for identifying visual and neurological abilities, for improving visual and neurological performance, or for both (the system of Pellicano discloses a variety of vision acuity tests for identifying visual abilities. See, col. 4 lines 4-8, 15-20, and 31-36). Note: web page is disclosed in Pellicano at col. 2 lines 67 to col. 3 lines 1-3.

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With regard to **claim 33** Pellicano discloses a portion of data sent over the Internet to be encrypted (i.e., encoded or coded) (the account number sent over the host server from the client terminal in coded. See, col. 3 lines 24-26).

With regard to **claim 34** it is conventional in the art to have the Internet use a certificates for security for protecting the user's private information.

With regard to **claim 35** both Pellicano and Sinclair discloses evaluating the visual and neurological perception ability of the user by evaluating the user's response to a series of images as disclosed throughout the invention (See, Sinclair col. 5 lines 22-25).

With regard to **claim 36** Sinclair discloses the image comprising one or more Gabor patches (Sinclair discloses "C" images or gratings seen in Fig. 3 at element 18. See, col. 7 lines 18-25. Note: it is well known in the art that the grating patterns are commonly referred to as Gabor patches).

With regard to **claim 37** Sinclair discloses generating a further image, which is carried out using a configuration that has a different size than the image (Sinclair increases/decreases the size of the "C" upon user's input. See, col. 6 lines 5-10).

With regard to **claim 38** Sinclair discloses generating a further image, which is carried out using a configuration that has a different exposure time than the image (further image has a different exposure time because Sinclair is changing the contrast with the size of the "C" after the user's input. See, col. 7 lines 30-34).

With regard to **claim 39** Sinclair discloses the image comprising a plurality of objects (i.e. the letters "c" and "C") arranged to form a non-collinear pattern (the non-collinear patter is clearly seen in Fig. 2).

Allowable Subject Matter

10. Claims 55-61 are allowed.
11. Claims 40-54 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The closest prior art to Pellicano and Sinclair are directed to a method for identifying visual and neurological abilities, for improving visual and neurological performance, or for both as disclosed in independent claims 23 and 28.

However, the closest prior art fails to disclose anything about having a system/method for improving the visual perception ability of a user by having a treatment phase built in a client/host processor as disclosed in claim 40. Further, the closest prior art fails to disclose having a client processor and host processor being controlled by said client input device: (a) to receive said first plurality of parameters, to generate a first plurality of images corresponding thereto, and to display said first plurality of images in said display device; (b) to register the responses inputted by the user via said input device; (c) to utilize said use responses to select the parameters of said second plurality of images in said host storage device corresponding to the images designed to treat the person with respect to a visual defect detected from said responses; and (d) to control said display device to display to the user, in a treatment phase, the selected images in said second plurality in at least one treatment session until the visual perception ability of the person has been improved with respect to said detected visual defect as disclosed in claim 40. It is for these reasons in combination with all the other elements of the claim that claims 40-54 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

12. The instant invention defines a method of improving the visual perception ability of a person as disclosed in claim 55. The claimed invention distinguishes over the prior art by the manner in which the client terminal, displaying to the person, in a treatment phase, said another plurality of images in at least one treatment session until the visual perception ability of the person has been improved with respect to said detected visual defect.

Method/apparatus for identifying visual and neurological abilities is conventional. However, the prior art of record fails to disclose the client terminal, displaying to the person, in a treatment phase, said another plurality of images in at least one treatment session until the visual perception ability of the person has been improved with respect to said detected visual defect. These elements in combination with all of the other elements of the claims are not taught or fairly suggested in the prior art of record. The dependent claims 56-61 are allowed for the same reasons.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D Patel whose telephone number is 703-306-4182. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DANIEL MARHAM
PRIMARY EXAMINER

Shefali D Patel
Examiner
Art Unit 2621

June 25, 2004